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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,787	06/06/2001	Venkatasubramanian Ananthanarayanan	DP-304512	5489

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EXAMINER

RUTHKOSKY, MARK

ART UNIT

PAPER NUMBER

1745

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/875,787

Applicant(s)

ANANTHANARAYANAN ET AL.

Examiner

Mark Ruthkosky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

Claims 1-10, 13, and 14 stand rejected under 35 U.S.C. 102(b) as being anticipated by Hollis et al. (US 3,849,203.) Newly added claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Hollis et al. (US 3,849,203.)

The instant claims are to a battery terminal for a battery case having a wall defining an inner surface of the case and an outer surface of the case. An aperture extends between the inner and outer surfaces of the case and the terminal including a barrel portion defining an outer circumferential surface extending through the aperture. One end of the barrel portion terminates in an outwardly projecting section from the outer surface of the case and a circumferentially extending, radially outwardly projecting shoulder on the opposite end of the barrel portion engaging the inner surface of the case when the barrel portion is inserted in the aperture. An annular retaining ring having an inner circumferential surface is installed on and secured to the outwardly projecting section of the barrel portion, which defines a radially projecting surface engaging the outer surface of the case, and the retaining ring longitudinally engaging said terminal.

Hollis et al. (US 3,849,203) teaches a battery terminal for a battery case having a wall defining an inner surface of the case and an outer surface of the case. An aperture extends between the inner and outer surfaces of the case and the terminal including a barrel portion defining an outer circumferential surface extending through the aperture. One end of the barrel portion terminates in an outwardly projecting section from the outer surface of the case and a

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circumferentially extending, radially outwardly projecting shoulder on the opposite end of the barrel portion engaging the inner surface of the case when the barrel portion is inserted in the aperture (see figures 1-2.) An annular retaining ring having an inner circumferential surface is installed on and secured to the outwardly projecting section of the barrel portion, which defines a radially projecting surface engaging the outer surface of the case (col. 2, lines 3-50.) The outer circumference of the barrel portion and the inner circumference of the surface of the retaining ring are dimensioned to receive the ring on the barrel portion with an interference fit there between that is fused together. The heating process for deforming the ring and bushing is considered a weld as the elements are fused together. The retaining ring longitudinally engages the terminal as shown in figure 2. Thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

Claims 11, 12, 15 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hollis et al. (US 3,849,203.)

The instant claims include the limitations that the step of heating the interface between the retaining ring and the projecting portion includes passing an electrical current through the retaining ring while pressing the ring into position. The teachings of Hollis et al. (US 3,849,203) have been presented. Hollis does not teach heating the interface by passing an electrical current through the retaining ring. Hollis does teach heating the ring interface as previously described. It would be obvious to one of ordinary skill in the art at the time the invention was made to use electrical current to heat the metal ring, as the current will produce heat by from the resistant of the metal. As passing current through a metal is well known in the art for producing heat and

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heating the ring is well described in Hollis et al. (US 3,849,203), it would be obvious to one of ordinary skill in the art to heat the ring by passing current through the interface in order to fuse the materials. The artisan would have found the claimed invention to be obvious in light of the teachings of the reference.

Response to Arguments

Applicant's arguments filed 10/22/2003 have been fully considered but they are not persuasive. The independent claims have been amended to include the limitation that the retaining ring is "longitudinally engages the terminal." The applicant notes that support for the amendment is shown in figure 1. The applicant argues that the prior art does not include this feature. It is clear from figures 1 and 2 of the Hollis reference that the retaining ring longitudinally engages the terminal. This is shown, as the ring 29 is adjacent to the terminal assembly along a longitudinal wall 24. The same feature is shown in figure 1 of the instant invention. Thus, the argument is not persuasive.

The applicant further argues that the retaining ring of the instant invention is welded or fused to the barrel portion of the terminal and that the joining together of the retaining ring and the barrel portion in the reference is not a weld. The examiner disagrees and has attached two definitions from the Merriam-Webster Collegiate Dictionary. Weld is defined as to unite (metallic parts) by heating and allowing for metals to flow together or by hammering or compressing with or without the previous heating; and to unite or reunite closely or intimately. Clearly, the reference teaches both heating and compressing the ring and the barrel portion to form a union of the elements. Fusing includes the definition 'to stitch by applying heat and

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pressure with or without the use of an adhesive.” As heat and pressure are applied, the materials of the reference are fused. Thus, the argument is not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 703-305-0587. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:00.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's


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supervisor, Patrick Ryan can be reached at 703-308-2383. The fax phone numbers is 703-872-9306.

Mark Ruthkosky

Primary Patent Examiner

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12/18/03